

Claims

1. An inflatable airbag cushion comprising: a bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed  
5 from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as  
10 to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present; at least a portion of said woven in joints extending in  
15 both the warp direction and the weft direction between said face portion and said rear portion, and all of said woven in joints consisting essentially of one or more straight line segments, at least one of said woven-in joints being longer than the other woven-in joints and forming a closed end between said face portion and said rear portion to prevent gas from escaping from said airbag cushion upon the  
20 introduction of gas into said cushion, wherein at least a portion of said flow barriers comprise substantially parallel woven in joints separated from one another by at least two yarns and no more than twelve yarns in each layer of fabric.

2. The invention according to Claim 1, wherein said flow barriers comprise box structures disposed across the interior of said bag.

5 3. The invention according to Claim 1, wherein said box structures are of multiple cornered construction.

10 4. The invention according to Claim 1, wherein said warp yarns and said weft yarns are formed from a polymer selected from the group consisting of polyester, Nylon 6 and Nylon 6.6.

5. The invention according to Claim 1, wherein said bag further comprises a porosity blocking coating.

15 6. An invention according to Claim 1, wherein said parallel woven in joints are separated from one another by no more than eight yarns in each layer of fabric.

20 7. The invention according to Claim 1, wherein said parallel woven in joints are separated from one another by no more than four yarns in each layer of fabric.

8. The invention according to Claim 1, wherein the woven-in joints are separated by an area of two layers of fabric.

9. The invention according to Claim 1, wherein the airbag is in the shape of a rectangle.

For the prior art